

## **LAUNDRY PROTECTOR**

### **FIELD OF INVENTION**

The present invention relates to a laundry protector, and more particularly to a  
5 laundry protector having a housing with an interior, an exterior, and a laundry opening  
therebetween, allowing a piece of laundry to be inserted into the interior of the housing  
through the laundry opening. After enclosing the piece of laundry in the housing, the  
laundry protector may be placed within a washing machine, allowing its contents to  
receive protection while being washed.

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### **BACKGROUND OF INVENTION**

Historically, washing laundry was accomplished through traditional hand-washing  
techniques. When hand washing a delicate piece of laundry such as a bra, an individual  
had to proceed cautiously to ensure that the piece of laundry remained undamaged.

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However, with advent of washing machines, washing laundry by hand has quickly  
become a thing of the past. As people pile loads of laundry into washing machines,  
people no longer have the luxury of carefully ensuring the safety of each piece of laundry  
individually. Washing machines use mechanized wash cycles to wash and rinse loads of  
20 laundry. Because of the mechanized nature of an electric washing machine, delicate  
laundry often becomes damaged in the wash cycle.

Therefore, it can be appreciated that there exists a continuing need for a new and  
improved laundry protector for protecting laundry when placed within a washing  
25 machine. The present invention substantially fulfills this need.

### **SUMMARY OF INVENTION**

The present invention relates to a laundry protector, and more particularly a  
laundry protector having a housing with an interior, an exterior, and a laundry opening  
30 therebetween. The laundry protector also includes a plurality of washing holes in the

housing, where the washing holes pass from the interior to the exterior, whereby a piece of laundry can be inserted into the interior of the housing through the laundry opening. After inserting the piece of laundry in the interior of the housing, the laundry protector may be placed in a washing machine, allowing its contents to receive protection while  
5 being washed while water and detergent pass through the plurality of washing holes.

In another aspect, the laundry protector further comprises a lid attached with the housing, where the lid covers the laundry opening. The lid of the housing can be manipulated to expose the laundry opening and allow a piece of laundry to be inserted  
10 into the interior of the housing through the laundry opening.

Additionally, the housing is constructed of a material selected from a group consisting of plastic, rubber, and metal.

15 In another aspect, the laundry protector has a three-dimensional shape and the three-dimensional shape is selected from a group consisting of a sphere, a polygon, an ellipsoid, and a cylindrical shape.

Furthermore, the housing has a top portion and a flattened portion, whereby the  
20 flattened portion allows the housing to sit evenly atop a surface without rolling so that a user can easily insert the piece of laundry.

In yet another aspect, the laundry protector has a length and the length is more than approximately three inches and less than approximately fourteen inches.  
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In another aspect, the piece of laundry is lingerie.

Additionally, at least one item from a set including the lid and the housing includes a finger indentation, allowing a user to take hold of the laundry protector while  
30 opening or closing the laundry protector.

In another aspect, the laundry protector further comprises at least one separator in the interior of the housing, whereby the separator creates a first compartment and a second compartment thereby preventing multiple items from touching each other while  
5 being washed. Furthermore, the separator include holes therethrough, thereby allowing fluids to pass from a first compartment to a second compartment.

In yet another aspect, the laundry protector further comprises at least one laundry-securing device in the interior of the housing. The laundry-securing device may be used  
10 to hold a hook end of a bra in place while washing, thereby prohibiting a hook from catching or tearing delicate fabrics. Additionally, the laundry-securing device includes teeth to engage with a piece of laundry, thereby holding the piece of laundry in place about the laundry-securing device while being washed.

15 Additionally, the laundry protector further comprises a base for attaching with the housing. The base prevents the laundry protector from rolling while inserting a piece of laundry into the interior of the housing. The base is constructed such that it attaches with the housing using at least one item selected from a group consisting of a male/female screw system and a snap system.

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In another aspect, the lid is attached with the housing through a connector.

In yet another aspect, the connector comprises a hinge and a snap, where the lid is attached with the housing with the hinge, thereby allowing the lid to be swung to an open  
25 position and a closed position, wherein, when in a closed position, the snap allows the lid to be securely fastened with the housing.

In another aspect, the connector comprises threads in the housing and corresponding threads in the lid, allowing the lid to be screwed into and fastened securely  
30 with the housing.

Finally, the lid and the connector are integrally formed as a lid-connector and wherein the lid connector is constructed of rubber having a lid-lip portion for attaching with a housing-lip portion to fit securely with the housing.

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### **BRIEF DESCRIPTION OF THE DRAWINGS**

The nature of the laundry protector described herein will be readily apparent in the following drawings, in which:

10 FIG. 1 is a side view of a laundry protector according to the present invention;

FIG. 2 is cut-away cross sectional view of the laundry protector of FIG. 1;

FIG. 3 is a top view of the laundry protector according to the present invention;

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FIG. 4 is a bottom view of a laundry protector according to the present invention;

FIG. 5 is a side view of a connector according to the present invention;

20 FIG. 6A is a side view of another aspect of a laundry protector according to the present invention;

FIG. 6B is a blown-up, cut-away view of a circle highlighted in FIG. 6A;

25 FIG. 7 is a side view of another aspect of a laundry protector according to the present invention, where the laundry protector is attached with a base;

FIG. 8 is a side view of a base for attaching with a housing;

FIG. 9 is a cut-away cross-sectional view of another aspect of a laundry protector according to the present invention, where the laundry protector includes a separator;

FIG. 10 is a top view of the laundry protector of FIG. 9;

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FIG. 11 is a cut-away cross-sectional view of another aspect of a laundry protector according to the present invention, where the laundry protector includes a laundry-securing device; and

10 FIG. 12 is a top view of the laundry protector of FIG. 11.

### DETAILED DESCRIPTION

The present invention relates to a laundry protector, and more particularly, to a laundry protector having a housing with an interior, an exterior, and a laundry opening therebetween, allowing a piece of laundry to be inserted into the interior of the housing through the laundry opening, and after enclosing the piece of laundry in the housing, the laundry protector may be placed within a washing machine, allowing its contents to receive protection while being washed.

20 The following description, taken in conjunction with the referenced drawings, is presented to enable one of ordinary skill in the art to make and use the invention.

Various modifications will be readily apparent to those skilled in the art, and the general principles defined herein may be applied to a wide range of aspects. Thus, the present invention is not intended to be limited to the aspects presented, but is to be accorded the widest scope consistent with the principles and novel features disclosed herein.

25 Furthermore it should be noted that unless explicitly stated otherwise, the figures included herein are illustrated diagrammatically and without any specific scale, as they are provided as qualitative illustrations of the concept of the present invention.

FIG. 1 illustrates a laundry protector **100** according to the present invention. The laundry protector **100** comprises a housing **102** with an interior **104**, an exterior **106**, and a laundry opening **108** therebetween. Due to the side view of FIG. 1, the laundry opening **108** is shown sideways in this particular illustration. The laundry protector **100** may be any suitable three-dimensional shape, non-limiting examples of which include a sphere, a polygon, an ellipsoid, and a cylindrical shape. Additionally, the laundry protector **100** may be any suitable length or dimension allowing the laundry protector to fit within a washing machine, a non-limiting example of which includes a length of more than three inches and less than fourteen inches.

The housing **102** may be constructed of any suitable durable material, non-limiting examples of which include plastic, rubber, and metal. A lid **110** is attached with the housing **102** and covers the laundry opening **108**. The lid **110** may be constructed of any suitable durable material, non-limiting examples of which include plastic, rubber, and metal. The lid **110** is attached with the housing **102** through a connector **112**. The connector **112** may be any suitable mechanism or device for connecting one object with another, non-limiting examples of which include a hinge with a snap (i.e. male/female joint system), and threads. For example, in the case where the lid **110** is attached with the housing **102** with a hinge **114**, the lid **110** may be swung open and thereafter closed to be securely fastened with the housing through use of a snap **116**. When a hinge **114** is used, the hinge **114** may be separately formed and thereafter attached with the lid **110**, or integrally formed with the lid **110**, such as a living hinge. In another example, in the case where the connector **112** uses threads, threads are included in the housing **102** with corresponding threads in the lid **110**, allowing the lid **110** to be screwed into and fastened securely with the housing **102**.

Additionally, a plurality of washing holes **117** pass from the interior **104** to the exterior **106** of the housing **102**. The washing holes **117** may be any suitable size or placed at any suitable location to allow water and detergent to pass therethrough.

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The lid 110 of the housing 102 can be opened to expose the laundry opening 108. Once opened, a piece of laundry can be inserted into the interior 104 of the housing 102 through the laundry opening 108. After closing the lid 110 and enclosing the piece of laundry in the interior 104 of the housing 102, the laundry protector 100 may be placed in  
5 a washing machine, allowing its contents to receive protection while being washed, with water and detergent passing through the plurality of washing holes 117. The piece of laundry may be any piece of laundry capable of fitting within the interior 104 of the housing 102, non-limiting examples of which include lingerie such as a bra and nylon stockings.

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Furthermore, the housing 102 has a top portion 118 and a flattened portion 120. The flattened portion 120 allows the housing 102 to sit securely atop a surface without rolling so that a user can easily insert the piece of laundry into the housing 102. The flattened portion 120 may be located at any suitable location along the housing 102. For  
15 example and as illustrated in FIG. 1, the flattened portion 120 may be located on a bottom of the housing 102. In another aspect, the flattened portion 120 may be located on a side of the housing 102 which allows the laundry protector 100 to be easily loaded at an angle.

Additionally, the laundry protector 100 may optionally include finger indentations  
20 122. The finger indentations 122 allow a user to take hold of the laundry protector 100 while opening or closing it. The finger indentations 122 may be located at any suitable location allowing a user to take hold of the laundry protector 100, non-limiting examples of such locations including in the housing 102 and the lid 110.

25 FIG. 2 is a cut-away cross-sectional view of a laundry protector 100. As shown in FIG. 2, the lid 110 may be manipulated to expose the laundry opening 108. Once exposed, the piece of laundry 200 may be inserted into the interior 104 of the housing 102.

FIG. 3 is a top view of the laundry protector **100** of FIG. 1. As shown in FIG. 3, finger indentations **122** may be included in the lid **110**, allowing a user to easily manipulate the lid **110**.

5           FIG. 4 is a bottom view of the laundry protector **100** of FIG. 1. As shown in FIG. 4, finger indentations **122** may be included in the bottom of the housing **102**. In this particular illustration, the finger indentations are included in the flattened portion **120** of the housing **102**.

10           FIG. 5 illustrates a laundry protector **100** with a connector **112**. As stated above, the connector **112** may be any suitable mechanism or device for connecting one object with another, non-limiting examples of which include a hinge with a snap and threads. As illustrated in FIG. 5, when the connector **112** uses threads **500**, threads **500** are included in the housing **102** with corresponding threads **500** in the lid **110**. The threads  
15   **500** allow the lid **110** to be screwed into and fastened securely with the housing **102**. A spacer **502** may be optionally included with the threads **500**. The spacer **502** may be a compressible rubber, allowing the lid **110** to be secured against the housing **102**. In this form, when the lid **110** is removed, the piece of laundry **200** may be inserted into the interior **104** of the housing **102**. Once inserted, the lid **110** may be screwed back into  
20   place and thereby protects the piece of laundry **200**.

FIG. 6A illustrates a laundry protector **100** with another type of a connector **600**. In this aspect, the lid **110** and the connector **600** are integrally formed as a lid-connector **110/600**. The lid-connector **110/600** may be constructed of any suitable durable material,  
25   non-limiting examples of which include plastic and rubber. Additionally, the lid-connector **110/600** may also include washing holes **117**, where the washing holes pass from an interior to an exterior of the housing **102**.

The connector **600** has a lid-lip portion **602** and the housing as a housing-lip  
30   portion **604**. The housing-lip portion **604** is constructed such that the lid-lip portion **802**



attaches therein, allowing the lid-connector **110/600** to be securely attached with the housing **102**.

FIG. **6B** illustrates a blown-up, cut-away view of a circle highlighted in FIG. **6A**.  
5 As shown in FIG. **6B**, the housing-lip portion **604** is constructed such that the lid-lip portion **602** attaches therein, allowing the lid-connector **110/600** to be securely attached with the housing **102**.

FIG. **7** illustrates another aspect of a laundry protector **100** according to the  
10 present invention. In this aspect, the laundry protector **100** may be removably attached with a base **700** to prevent the laundry protector **100** from rolling while inserting a piece of laundry into the interior **104** of the housing **102**. The base **700** may be constructed of any suitably durable material, non-limiting examples of which include plastic, rubber, and metal.

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FIG. **8** illustrates a base **700**. The base **700** may be attached with the housing through any suitable mechanism or device for attaching one object with another, non-limiting examples of which include a male/female screw system, and a snap system. As illustrated in FIG. **8**, the base **700** may include a screw system **800**, where the screw  
20 system **800** can be screwed into a corresponding screw system on the housing.

FIG. **9** illustrates another aspect of a laundry protector **100** according to the present invention. In this aspect, the laundry protector **100** further comprises at least one separator **900** in the interior **104** of the housing **102**. The separator **900** prevents multiple  
25 items from touching each other while being washed. The separator **900** may be constructed of any suitable durable material, non-limiting examples of which include plastic, rubber, and metal. Additionally, the separator **900** may include holes therethrough, allowing fluids to pass from a first compartment **902** to a second compartment **904**. Furthermore, the separator **900** may be permanently affixed or  
30 removably attached within the housing **102**. When removably attached within the

housing **102**, the separator **900** may be removably attached through any suitable mechanism or device for removably attaching one object with another, a non-limiting example of which includes rails **906**. As shown in FIG. **9**, the rails **906** allow the separator **900** to be slid into and affixed with the housing **102**.

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FIG. **10** is a top perspective view of the laundry protector **100** of FIG. **9**. As shown, the separator **900** compartmentalizes the laundry protector **100**, creating a first compartment **902** and a second compartment **904**.

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FIG. **11** illustrates another aspect of a laundry protector **100** according to the present invention. In this aspect, the laundry protector **100** includes a laundry-securing device **1100** in the interior **104** of the housing **102**. The laundry-securing device **1100** may be any suitable mechanism or device for holding a piece of laundry firmly in place, a non-limiting example of which includes a bar. In this aspect, the laundry-securing device

15 **1100** may be used to hold a hook end of a bra in place while washing, thereby prohibiting a hook from catching or tearing delicate fabrics. The laundry-securing device **1100** may be constructed of any suitably durable material, non-limiting examples of which include plastic, rubber, and metal.

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Additionally, the laundry-securing device **1100** is attached with the housing **102** through use of a device-connector **1102**. The device-connector **1102** may be any suitable mechanism or device for connecting one object with another, a non-limiting example of which includes a hinge. Furthermore, the laundry-securing device **1100** may be fastened with the housing **102** through use of a device-fastener **1104**. The device-fastener **1104**

25 may be any suitable mechanism or device for fastening one object with another, a non-limiting example of which includes a fastener tab. In this aspect, the laundry-securing device **1100** may be unfastened, allowing the piece of laundry to be placed beneath the laundry-securing device **1100**. The laundry-securing device **1100** may then be placed over the piece of laundry and fastened with the housing **102** using the fastener tab.

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The laundry-securing device **1100** may also include teeth **1106**. The teeth **1106** are constructed such that they engage with the piece of laundry to prevent the piece of laundry from slipping out while being washed. The teeth **1106** may be any suitable size or placed at any suitable location to firmly engage with the piece of laundry.

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FIG. **12** is a top perspective view of the laundry protector **100** of FIG. **11**. As shown in FIG. **12**, a bra **1200** may be firmly affixed within the interior **104** of the housing **102** through use of the laundry-securing device **1100**. In this aspect, a hook end **1202** of the bra **1200** is held against the housing **102** with the hooks facing the housing **102**,  
10 thereby preventing the hooks from catching or tearing other delicate fabrics placed within the laundry protector **100**.